



PATENT  
Docket No. 342312001302

I hereby certify that this correspondence is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV 332781275 US, in an envelope addressed to: MS RCE, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on the date shown below.

Dated:

9/10/03

Signature:

(Tamara Alcaraz)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Dinesh PATEL et al.

Serial No.: 09/738,859

Filing Date: December 13, 2000

For: NOVEL SUCCINATE COMPOUNDS,  
COMPOSITIONS AND METHODS OF  
USE AND PREPARATION

Examiner: T. A. Solola

Group Art Unit: 1626

**INFORMATION DISCLOSURE  
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98**

Mail Stop RCE  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicants submit for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Copies of documents numbered 94-96, 103, 108, 119-120, and 141 are submitted herewith. However, copies of the remaining documents cited in the attached Form PTO-1449 were previously submitted in an Information Disclosure Statement directed to the related application Serial

Number 09/466,402, filed December 17, 1999, which was converted to a provisional application Serial Number 60/266,329, filed December 17, 1999, and, accordingly, copies are not included herewith. This protocol conforms with 37 C.F.R. §1.98(d) and M.P.E.P. 609(A)(2). The Examiner is requested to make these documents of record in the application.

This Information Disclosure Statement is submitted:

- ☒ With the application; accordingly, no fee or separate requirements are required. Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114.
- ☐ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required.
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
  - ☐ A fee is required. A check in the amount of \_\_\_ is enclosed.
  - ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a check in the amount of \_\_\_ is enclosed.
  - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided below and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)

Applicants would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Supplemental Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search

has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief is required, Applicants petition for any required relief including extensions of time and authorize the Assistant Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to **Deposit Account No. 03-1952** referencing 342312001302. However, the Assistant Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: September 10, 2003

Respectfully submitted,

By:   
Lorna Tanner  
Registration No. 50,782

Morrison & Foerster LLP  
755 Page Mill Road  
Palo Alto, California 94304-1018  
Telephone: (650) 813-5600  
Facsimile: (650) 494-0792

Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

## U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Document Date (MM/DD/YYYY)	Document No.	Name	Filing Date If Appropriate
	1.	01/19/1965	3,166,587	Bernstein et al.	
	2.	08/08/1967	3,335,145	Cislak et al.	
	3.	10/21/1986	4,618,708	Roques et al.	
	4.	04/19/1988	4,738,803	Roques et al.	
	5.	01/31/1989	4,801,721	Ryan et al.	
	6.	11/20/1990	4,971,978	Nadzan et al.	
	7.	02/26/1991	4,996,358	Handa et al.	
	8.	03/10/1992	5,095,126	Witiak et al.	
	9.	05/25/1993	5,214,197	Hayashi et al.	
	10.	08/03/1993	5,232,929	Desai et al.	
	11.	06/07/1994	5,318,964	Broadhurst et al.	
	12.	07/26/1994	5,332,817	Desai et al.	
	13.	02/07/1995	5,387,610	Gray et al.	
	14.	09/26/1995	5,453,438	Campion et al.	
	15.	05/07/1996	5,514,677	Davidson et al.	
	16.	05/28/1996	5,521,199	Jacobs et al.	
	17.	07/02/1996	5,532,265	Gijbels et al.	
	18.	07/16/1996	5,536,727	Witzel et al.	
	19.	08/27/1996	5,550,147	Matsuo et al.	
	20.	10/08/1996	5,563,151	Bowles et al.	
	21.	01/14/1997	5,594,106	Black et al.	
	22.	03/11/1997	5,610,162	Witzel et al.	
	23.	04/01/1997	5,616,605	Gray et al.	
	24.	05/13/1997	5,629,285	Black et al.	
	25.	07/01/1997	5,643,964	Dickens et al.	

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

pa- 814642

PTO/SB/ 08 (04-03)

Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

# INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

26.	07/29/1997	5,652,262	Crimmin et al.
27.	09/23/1997	5,670,136	Bacon et al.
28.	09/23/1997	5,670,533	Matsuo et al.
29.	11/25/1997	5,691,382	Crimmin et al.
30.	12/09/1997	5,696,082	Crimmin et al.
31.	12/23/1997	5,700,838	Dickens et al.
32.	04/21/1998	5,741,771	Dawson et al.
33.	04/21/1998	5,741,794	Bowles et al.
34.	05/05/1998	5,747,514	Beckett et al.
35.	05/19/1998	5,753,671	Miller et al.
36.	06/09/1998	5,763,621	Beckett et al.
37.	10/13/1998	5,821,262	Crimmin et al.
38.	11/10/1998	5,834,243	Bogosian
39.	11/24/1998	5,840,939	Beckett et al.
40.	12/15/1998	5,849,951	Floyd et al.
41.	01/12/1999	5,859,253	Beckett et al.
42.	01/19/1999	5,861,436	Beckett et al.
43.	02/02/1999	5,866,588	Ayscough et al.
44.	02/02/1999	5,866,717	Beckett et al.
45.	02/16/1999	5,872,152	Brown et al.
46.	03/09/1999	5,879,905	RajBhandary
47.	05/11/1999	5,902,791	Beckett et al.
48.	06/01/1999	5,908,851	Beckett et al.
49.	06/08/1999	5,910,609	Campion et al.
50.	06/15/1999	5,912,360	Dickens
51.	06/29/1999	5,917,090	Huxley et al.
52.	07/06/1999	5,919,940	Martin
53.	08/03/1999	5,932,695	Floyd et al.
54.	08/10/1999	5,936,116	Martin et al.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

55.	10/05/1999	5,962,529	Miller et al.
56.	10/26/1999	5,972,980	Cornicelli et al.
57.	11/16/1999	5,986,132	Reeve et al.
58.	03/14/2000	6,037,472	Castelhano et al.

## FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Publication Date (MM/DD/YYYY)	Document No.	Country	Translation	
					YES	NO
	59.	08/13/1992	31199/89	Australia		
	60.	06/22/1983	0 082 088	Europe	Abstract	
	61.	03/17/1987	0 214 639	Europe	Abstract	
	62.	11/23/1989	0 342 325	Europe	Abstract	
	63.	09/09/1998	0 863 152	Europe		
	64.	09/09/1998	0 863 205	Europe		
	65.	11/25/1998	0 879 879	Europe		
	66.	04/28/1999	0 911 409	Europe		
	67.	10/13/1999	0 949 238	Europe		
	68.	12/06/1984	DE 3320175	Germany	Abstract	
	69.	08/05/1981	JP 56-97266	Japan	Abstract	
	70.	03/07/1991	JP 3-53891	Japan	Abstract	
	71.	07/05/1991	JP 3-157372	Japan	Abstract	
	72.	04/16/1993	JP 5-92948	Japan	Abstract	
	73.	01/07/1997	JP 9-003094	Japan	Abstract	
	74.	05/11/1966	1,028,921	United Kingdom		
	75.	11/16/1989	WO 89/10752	WIPO		
	76.	12/23/1993	WO 93/25574	WIPO		
	77.	04/14/1994	WO 94/07527	WIPO		
	78.	05/26/1994	WO 94/10990	WIPO		
	79.	03/02/1995	WO 95/06031	WIPO		

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

Inventors

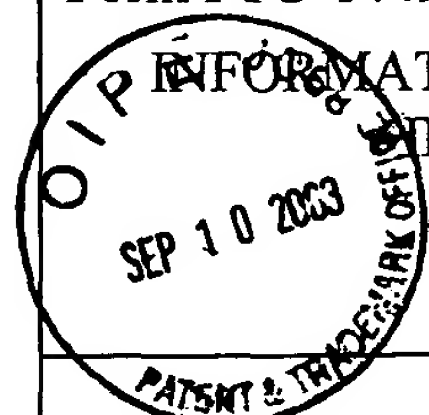
Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola



# INFORMATION DISCLOSURE CITATION IN AN APPLICATION

(Use several sheets if necessary)

80.	11/09/1995	WO 95/29892	WIPO		
81.	12/07/1995	WO 95/32944	WIPO		
82.	05/30/1996	WO 96/16027	WIPO		
83.	10/24/1996	WO 96/33165	WIPO		
84.	10/24/1996	WO 96/33166	WIPO		
85.	09/12/1997	WO 97/32846	WIPO		
86.	10/23/1997	WO 97/38705	WIPO		
87.	01/29/1998	WO 98/03664	WIPO		
88.	04/30/1998	WO 98/17655	WIPO		
89.	05/07/1998	WO 98/18754	WIPO		
90.	06/11/1998	WO 98/24474	WIPO		
91.	09/03/1998	WO 98/38179	WIPO		
92.	10/22/1998	WO 98/46563	WIPO		
93.	11/26/1998	WO 98/52910	WIPO		
94.	06/21/2001	WO 01/44178	WIPO		
95.	06/21/2001	WO 01/44179	WIPO		

## OTHER DOCUMENTS

(including Author, Title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	96.	(1989) <i>Chemical Abstracts</i> Volume 111, page 668.
	97.	Beckett, R. Paul et al., (February 1993) "A Short Diastereoselective Synthesis of 2,3-Disubstituted Succinates" <i>SYNLETT</i> , pp. 137-138.
	98.	Broadhurst, M.J. et al., (1997) "Design and Synthesis of the Cartilage Protective Agent (CPA, Ro32-3555) <i>Bioorganic &amp; Medicinal Chemistry Letters</i> 7(17): 2299-2302.
	99.	Chan, Michael K. et al., (1997) "Crystal Structure of the Escherichia coli Peptide Deformylase" <i>Biochemistry</i> 36:13904-13909.
	100.	Cotter, Cheryl S. et al, (October 1996) "Inhibition of proteases in Pseudomonas otitis media in chinchillas" <i>Otolaryngology-Head and Neck Surgery</i> , 115(4): 342-351.
	101.	Cushman, David W. and Ondetti, Miguel A. (1980) "Chapter 2: Inhibitors of Angiotensin-Converting Enzyme" in <i>Progress in Medicinal Chemistry</i> Vol. 17, G. P. Ellis and G. B. West (ed.), Elsevier/North-Holland Biomedical Press, pp. 41-104.

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

- |      |  |
|------|--|
| 102. | Cushman, D. W. et al., (1977) "Design of Potent Competitive Inhibitors of Angiotensin-Converting Enzyme. Carboxyalkanoyl and Mercaptoalkanoyl Amino Acids" <i>Biochemistry</i> 16:5484-5491.   |
| 103. | Czapski, G. and Goldstein, S. (1990) "Superoxide Scavengers and Sod or Sod Mimics," <i>Adv. Exper. Med. &amp; Biol.</i> 264:45-50.   |
| 104. | Dardel, Frederic et al. (1998) "Solution Structure of Nickel-peptide Deformylase" <i>J. Mol. Biol.</i> 280:501-513.  |
| 105. | Decicco, Carl P. et al., (June 1995) "An Improved Asymmetric Synthesis of Piperazic Acids: Retro-Reaction in the Chiral Oxazolidinone Controlled Di-Azo Addition Reaction in a Dipolar Aprotic Medium" <i>SYNLETT</i> , pp. 615-616.                     |
| 106. | Dugger, Robert W. et al., (1992) "A Novel Synthesis of nor-C-Statine" <i>Tetrahedron Letters</i> 33(45):6763-6733.   |
| 107. | Dupont Merck Pharm. Co. (1996) "Patent Evaluation: Pulmonary-Allergy, Dermatological, Gastrointestinal & Arthritis: Matrix Metalloproteinase Inhibitors" for WO 95/29892 <i>Exp. Opin. Ther. Patents</i> 6(5):499-501                                    |
| 108. | Foye, W. O. (1981) "Chapter 37: Radioprotective Drugs," <i>Burgers Med. Chem.</i> 4th Edition, 3:11, 22, 29-35, 39, 44.  |
| 109. | Fujii, Hideji et al., (1996) "Inhibition of Tumor Cell Invasion and Matrix Degradation by Aminopeptidase Inhibitors" <i>Biol. Pharm. Bull.</i> 19(1):6-10.   |
| 110. | Galardy, Richard E., (1993) "Galardin™: Antiinflammatory Protease Inhibitor" <i>Drugs of the Future</i> 18(12):1109-1111   |
| 111. | Giglione, Carmela et al., (2000) "Peptide Deformylase as a Target for New Generation, Broad Spectrum Antimicrobial Agents" <i>Molecular Microbiology</i> 36(6):1197-1205.  |
| 112. | Gordon, James J. et al., (1975) "Studies concerning the Antibiotic Actinonin. Part I. The Constitution of Actinonin. A Natural Hydroxamic Acid with Antibiotic Activity" <i>J.C.S. Perkin I</i> , pp. 819-860.   |
| 113. | Haruyama, Hideyuki et al., (December 1994) "Matlystatins, New Inhibitors of Type IV Collagenases from <i>Actinomadura atramentaria</i> " <i>The Journal of Antibiotics</i> 47(12):1473-1480.   |
| 114. | Hu, Yun-Jin et al., (1999) "Determination of Substrate Specificity for Peptide Deformylase through the Screening of a Combinatorial Peptide Library" <i>Biochemistry</i> 38: 643-650.  |
| 115. | Jacobson, Irina C. et al., (1998) "Structure-Based Design and Synthesis of a Series of Hydroxamic Acids with a Quaternary-Hydroxy Group in P1 as Inhibitors of Matrix Metalloproteinases" <i>Bioorganic &amp; Medicinal Chemistry Letters</i> 8:837-842. |
| 116. | Jacobson, Irina C. et al., (1996) "Asymmetric Reactions of Chiral Imide Enolates with $\alpha$ -Keto Esters" <i>Tetrahedron Letters</i> , 37(46):8263-8266.  |
| 117. | Levy, Daniel E. et al., (1998) "Matrix Metalloproteinase Inhibitors: A Structure-Activity Study" <i>J. Med. Chem.</i> 41:199-223.  |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.



Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

- |      |   |
|------|---|
| 118. | Linderman, Russell, J. et al., (1992) "A Direct Conversion of ( $\alpha$ -Hydroxyalkyl)silanes to Carboxylic Acids" <i>Tetrahedron Letters</i> , 33(45): 6767-6770.                                       |
| 119. | Matsushita, T. and Shono, T. (1981) "Reactions of Manganese (III) Schiff Base Complexes With Superoxide Ion in Dimethyl Sulfoxide," <i>Bull. Chem. Soc. Jpn.</i> 54:3743-3748.                            |
| 120. | Matsushita, T. et al., (1981) "The Preparation and Characterization of Dichloromanganese (IV) Schiff Base Complexes," <i>Bull. Chem. Soc. Jpn.</i> 54(9):2646-2651.                                       |
| 121. | McClure, Kim F. et al., (1998) "Alkylation of Succinates: Synthesis of RO 32-3555," <i>Bioorganic &amp; Medicinal Chemistry Letters</i> 8:143-146.  |
| 122. | Meinzel, T. (2000) "Peptide Deformylase of Eukaryotic Protists: A Target for new Antiparasitic Agents?" <i>Parasitology Today</i> 16(4):165-168.  |
| 123. | Nugiel, David A. et al., (1995) "Probing the P3' Pocket of Stromelysin with Piperazic Acid Analogs" <i>Bioorganic &amp; Medicinal Chemistry Letters</i> 5(24): 3053-3056.                                 |
| 124. | Ogita, Takeshi, et al., (1992) "Matlystatins, New Inhibitors of Type IV Collagenases from <i>Actinomadura Atramentaria</i> " <i>The Journal of Antibiotics</i> 45(11):1723-1732.                          |
| 125. | Ragusa, Stephane et al., (1999) "Substrate Recognition and Selectivity of Peptide Deformylase. Similarities and Differences with Metzincins and Thermolysin" <i>J. Mol. Biol.</i> 289:1445-1457.          |
| 126. | Steinman, Douglas et al., (1998) "The Design, Synthesis, and Structure-Activity Relationships of a Series of Macrocyclic MMP Inhibitors" <i>Bioorganic &amp; Medicinal Chemistry Letters</i> 8:2087-2092. |
| 127. | Tamaki, Kazuhiko et al., (January 1995) "Total Synthesis and Inhibitory Activity against Gelatinase B of YL-01869P" <i>The Journal of Antibiotics</i> 48(1):87-88.  |
| 128. | Tamaki, Kazuhiko et al., (December 1994) "Matlystatins, New Inhibitors of Type IV Collagenases from <i>Actinomadura atramentaria</i> " <i>The Journal of Antibiotics</i> 47(12):1481-1492.                |
| 129. | Tamaki, Kazuhiko et al., (1993) "Synthesis and Determination of the Absolute Configuration of Matlystatin B" <i>Tetrahedron Letters</i> 34(4):683-686.  |
| 130. | Tamaki, Kazuhiko et al., (1993) "Total Synthesis of Matlystatin A" <i>Tetrahedron Letters</i> 34(52):8477-8480.   |
| 131. | Tanzawa, Kazuhiko et al., (November 1992) "Matlystatins, New Inhibitors of Type IV Collagenases from <i>Actinomadura atramentaria</i> " <i>The Journal of Antibiotics</i> 45(11):1733-1737.               |
| 132. | DialogWeb JAPIO, MicroPatent, DERWENT WPI Abstracts of JP-56097266A.  |
| 133. | DialogWeb JAPIO, MicroPatent, DERWENT WPI Abstracts of JP-9003094A.   |
| 134. | DialogWeb JAPIO, MicroPatent, DERWENT WPI Abstracts of JP-5092948A.   |
| 135. | JAPIO Abstract, DERWENT WPI Abstracts of JP-03053891.   |
| 136. | JAPIO Abstract, DERWENT WPI Abstracts of JP-03157372.   |
| 137. | DERWENT WPI Record of EP 0 236 872.   |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449

Docket Number 342312001302

Application Number 09/738,859

Inventors

Dinesh PATEL et al.

Filing Date December 13, 2000

Group Art Unit 1626

Mailing Date September 10, 2003

Examiner Name T. A. Solola

INFORMATION DISCLOSURE CITATION  
IN AN APPLICATION

(Use several sheets if necessary)

- |      |  |
|------|--|
| 138. | DERWENT WPI Record of EP 0 082 088.  |
| 139. | DERWENT WPI Record of DE 3320175.  |
| 140. | DERWENT WPI Record for EP 0 342 325.   |
| 141. | English translation of Japanese Patent Application No. 54-173822 filed on December 28, 1979, published on August 5, 1981, as publication no. 56-97266, 15 pages. |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.